

256 Faraday's Researches

1. Platinum.
2. Iron.
3. Zinc.
4. Copper.
5. Plumbago.
6. Scale oxide of iron.
7. Native peroxide of manganese.
8. Native grey sulphuret of copper.
9. Native iron pyrites.
10. Native copper pyrites,
- n. Galena.
10. Artificial sulphuret of copper.
11. Artificial sulphuret of iron.
12. Artificial sulphuret of bismuth.

i and 2 with 5, 6, 7, 8, 9, io, n, 12, 13, 14, in turn,

i and 3 with 5, 6, 7, 8, 9, 10, n, 12, 13, 14.

i and 5 with 6, 7, 8, 9, 10, n, 12, 13, 14.

13. and 6 with 7, 8, 9, 10, n, 12, 13, 14.

14. and 5 with 6, 7, 8, 9, 10, n, 12, 13, 14.

4 and 6 with 7, 8, 9, 10, n, 12, 13, 14.

4 and 7 with 8, 9, 10, n, 12, 13, 14.

4 and 8 with 9, 10, u, 12^ 13, 14.

4 and 9 with io, n, 12., 13, 14.

4 and 10 with n, 12., 13, 14.

4 and 11 with 12, 13, 14.

4 and 12 with 13, 14.

4 and 13 with 14.

i and 4 with 12.

15. Marianini states from experiment that copper is positive to sulphuret of copper;¹ with the Voltaists, according to the same philosopher, sulphuret of copper is positive to iron (866), and with them also iron is positive to copper. These three bodies therefore ought to give a most powerful circle: but on the contrary, whatever sulphuret of copper I have used, I have found not the slightest effect from such an arrangement.

16. As peroxide of lead is a body causing a powerful current in solution of sulphuret of potassium, and indeed in every case of a circuit where it can give up part of its oxygen, I thought it reasonable to expect that its contact with metals would produce a current, if contact ever could. A part of that which had been prepared (810), was therefore well dried, which is

¹ *Mcmorie della Society Italiana in Modena*, 1827, xxi. 224.